

# Colorado Department of Public Health and Environment

# **OPERATING PERMIT**

Boral Material Technologies, Inc. – Pawnee Station

First Issued: October 1, 2003

# AIR POLLUTION CONTROL DIVISION COLORADO OPERATING PERMIT

FACILITY NAME: Boral Material OPERATING PERMIT NUMBER

Technologies, Inc.

Pawnee Station

FACILITY ID: 0870011

RENEWED: January 1, 2012 EXPIRATION DATE: January 1, 2017

MODIFICATIONS: See Appendix F of Permit

Issued in accordance with the provisions of Colorado Air Pollution Prevention and Control Act, 25-7-101 et seq. and applicable rules and regulations.

03OPMR244

ISSUED TO: PLANT SITE LOCATION:

Boral Industries, Inc. 14940 County Road 24 200 Mansell Court East, Suite 310 Brush, CO 80723 Reguell, CA 20076

Roswell, GA 30076 Morgan County

#### INFORMATION RELIED UPON

Operating Permit Renewal Application Received: September 28, 2007 And Additional Information Received: December 18, 2009

Nature of Business: Ash Processing at a Coal-Fired Electric Generating Station

Primary SIC: 4911

RESPONSIBLE OFFICIAL FACILITY CONTACT PERSON

Name: Gary Shelton Name: Mike Whitehead

Title: President Title: Manager, Environmental, Health and

Safety

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# SUBMITTAL DEADLINES

First Semi-Annual Monitoring Period: January 1 – March 31

Subsequent Semi-Annual Monitoring Periods: April 1 – September 30, October 1- March 31

Semi-Annual Monitoring Reports: Due on May 1, 2012 & November 1, 2012 and subsequent years

First Annual Compliance Period:

Subsequent Annual Compliance Period:

January 1 – September 30

October 1 – September 30

Annual Compliance Certification: Due on November 1, 2012 and subsequent years

Note that the Semi-Annual Monitoring Reports and Annual Compliance Certifications must be received at the Division office by 5:00 p.m. on the due date. Postmarked dates will not be accepted for the purposes of determining the timely receipt of those reports.

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## **SECTION I - General Activities and Summary**

#### **Permitted Activities** 1.

1.1 Boral Material Technologies, Inc (BMTI) performs ash conditioning, handling and blending operations at Public Service Company's Pawnee Station. Pawnee station is classified as an electric services facility under Standard Industrial Classification 4911. BMTI is a support facility for Pawnee Station and as such is considered a single stationary source with Pawnee Station for purposes of prevention of significant deterioration (PSD) review, Title V operating permit and MACT requirements.

The Boral facility would not need an operating permit if it was not located on the site of a major source, since its emissions are not above 100 tons per year. The following description addresses the reason that an operating permit is required. The Manchief Generating Station (010PMR236) is co-located with Public Service Company's (PSCo's) Pawnee Generating Station. Since the two facilities are located on contiguous and adjacent property, belong to the same industrial grouping (first two digits of the SIC code are the same) and are under common control (via a power purchase agreement with PSCo), they are considered a single stationary source for purposes of major stationary source new source review and Title V operating permit applicability. A separate Title V operating permit was issued for PSCo's Pawnee Station (96OPMR129). In addition, Boral Material Technologies, Inc. (BMTI) conducts ash conditioning, handling and blending operations at Pawnee station. BMTI is considered a support facility for PSCo's Pawnee Station and as such is considered a single source with PSCo's Pawnee Station and subsequently BMTI is also considered a single source with Manchief Generating Station. A separate Title V permit was issued for BMTI Pawnee Station (03OPMR244).

This facility is located at 14940 County Road 24, near Brush in Morgan County. The area in which the plant operates is designated as attainment for all criteria pollutants.

The following is a description of the ash conditioning, handling and blending operations conducted by BMTI. Fly ash is transferred from the fly ash silo via enclosed screw conveyors to an enclosed conditioning system (pug mill) where water is added to create conditioned ash. The conditioned ash is then gravity transferred directly into a truck inside the ash conditioning (or MACS) building or onto the MACS building floor, then loaded onto trucks with a front-end loader. The conditioned ash is then hauled to an area (the PSCo ash pit) that serves as the storage and blending operation for bottom ash, conditioned ash, and sometimes, rock. The bottom ash is hauled to the blending area from an on-site PSCo storage bay. The rock is hauled in from off-site. The bottom ash and condition ash (and rock, as needed) are blended and screened to create a beneficial reuse product – base course (e.g. road base). Finally, the base course is loaded and hauled off-site as product.

Boral also contracts for some ash processing activities with Son Haul. Son Haul utilizes a screen and associated diesel engine which powers an electrical generator to remove large pieces of ash. The screen is not subject to New Source Performance Standards for screens (OOO) because it

Operating Permit Number: 03OPMR244 First Issued: 10/1/03 does not process non-metallic mineral. The engine is subject to NSPS Subpart IIII which sets engine emission standards for engines as manufactured. The screen and engine were previously portable sources, but have now been permitted as part of the Boral plant.

There are no affected states within 50 miles of the plant. There are no Federal Class I designated areas within 100 kilometers of the plant.

- 1.2 Until such time as this permit expires or is modified or revoked, the permittee is allowed to discharge air pollutants from this facility in accordance with the requirements, limitations, and conditions of this permit.
- 1.3 The Operating Permit incorporates the applicable requirements contained in the underlying construction permits, and does not affect those applicable requirements, except as modified during review of the application or as modified subsequent to permit issuance using the modification procedures found in Regulation No. 3, Part C. These Part C procedures meet all applicable substantive New Source Review requirements of Part B. Any revisions made using the provisions of Regulation No. 3, Part C shall become new applicable requirements for purposes of this Operating Permit and shall survive reissuance. This permit incorporates the applicable requirements (except as noted in Section II) from the following construction permits: 01MR0683 and 09PO0942.
- 1.4 All conditions in this permit are enforceable by the US Environmental Protection Agency, Colorado Air Pollution Control Division (hereinafter Division) and its agents, and citizens unless otherwise specified. State-only enforceable conditions are: Permit Condition Number(s): Section IV, Conditions 3.d, 3.g (last paragraph), 14 and 18 (as noted).
- 1.5 All information gathered pursuant to the requirements of this permit is subject to the Recordkeeping and Reporting requirements listed under Condition 22 of the General Conditions in Section IV of this permit. Either electronic or hard copy records are acceptable.

#### 2. Alternative Operating Scenarios

- 2.1 The permittee shall be allowed to make the following changes to its method of operation without applying for a revision of this permit.
  - 2.1.1 No separate operating scenarios have been specified.

#### 3. Prevention Of Significant Deterioration (PSD)

3.1 This facility is located in an area designated attainment for all pollutants. It is categorized as a major stationary source (Potential to Emit ≥ 100 Tons/Year for PM, PM10, NOx, SO2, CO, and VOC. Future modifications at this facility resulting in a significant net emissions increase (see Reg 3, Part D, Sections II.A.26 and 42) for any pollutant as listed in Regulation No. 3, Part D, Section II.A.42 or a modification which is major by itself (i.e. a Potential to Emit of ≥ 100 TPY of any pollutant listed in Regulation No. 3, Part D, Section II.A.42) may result in the application of the PSD review requirements.

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3.2 The Boral Material Technologies facility and the Manchief Generating Station (01OPMR236), are considered a single source with Xcel's Pawnee Station (96OPMR129), and are to be considered in conjunction with each other for purposes of determining the applicability or non-applicability of Prevention of Significant Deterioration (PSD) regulations.

# 4. Accidental Release Prevent ion Program (112(r))

4.1 Based on the information provided by the applicant, this facility is not subject to the provisions of the Accidental Release Prevention Program (Section 112(r) of the Federal Clean Air Act).

Note however, that processes at Pawnee Station (addressed in Operating Permit 96OPMR129) are subject to the requirements in section 112(r) of the Federal Clean Air Act.

# **5.** Compliance Assurance Monitoring (CAM)

5.1 The following emission points at this facility use a control device to achieve compliance with an emission limitation or standard to which they are subject and have pre-control emissions that exceed or are equivalent to the major source threshold. They are therefore subject to the provisions of the CAM program as set forth in 40 CFR Part 64, as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV:

None.

# 6. Summary of Emission Units

6.1 The emissions units regulated by this permit are the following:

Emission Unit Number	AIRS Stack Number	Facility Identifier	Description	Start Up date	Pollution Control Device
MACS	014	MACS	AshTech Fly Ash Conditioning System, Model # M16 and Associated MACS Building	1/2002	Enclosed Screw Conveyors, Conditioner and Building
F001		F001	Fugitive Particulate Matter Emissions from Transport, Storage and Blending Operations. Portable blending operation consists of open feeder hoppers, open conveyors, and open screens (scalping screen and sizing screen).	1/2002	Various Control Measures

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Emission Unit Number	AIRS Stack Number	Facility Identifier	Description	Start Up date	Pollution Control Device
SH001	022	SH001	Screen: One (1) Powerscreen, Model: Turbochieftain, Serial No.: 6622411, 2-Deck vibrating screen, design feed rated at 60 tons per hour. Generator: one (1) Deutz, Model: BF4M2012, Serial No.: DIN/ISO30461FN, distillate fuel oil fired, 4-stroke, turbocharged, compression ignition, reciprocating internal combustion engine, heat input rated at 0.56 MMBTU per hour, output rated at 80 HP. Material Handling: Hopper loading. Six (6) equivalent transfers.	2009	enclosures / spray bars.

## **SECTION II - Specific Permit Terms**

#### 1. MACS – AshTech Fly Ash Conditioning System and Associated MACS Building

Parameter Permit		Limitations		Compliance	Monitoring	
	Condition Number	Short Term	Long Term	Emission Factor (lbs/ton)	Method	Interval
PM	1.1.	N/A	4.23 tons/yr	Ash Conditioner:	Recordkeeping	Monthly
$PM_{10}$		N/A	2.69 tons/yr	PM = 0.61 $PM_{10} = 0.61$ <b>Transfers:</b> PM = 0.2 $PM_{10} = 0.072$	and Calculation	
Fly Ash/Conditioned Ash Processed	1.2.	N/A	120,000 tons/yr	N/A	Recordkeeping and Calculation	Monthly
Opacity	1.3.	Not to Ex	ceed 20%	N/A	See Cond	ition 1.3.

1.1 Particulate Matter (PM and PM<sub>10</sub>) emissions from the ash conditioning system and MACs Building shall not exceed the above limitations (Colorado Construction Permit 01MR0683). Monthly emissions shall be calculated by the end of the subsequent month using the below emission factors (EPA's Compilation of Emission Factors (AP-42), dated January 1995, Section 11.17 for the ash conditioner and AWMA Air Pollution Engineering Manual, 2<sup>nd</sup> Edition, 2000, Table 1, pg 693, for coal processing - transfer and conveying) and the monthly quantity of fly ash/conditioned ash processed, as determined by Condition 1.2, in the equations identified below:

Ash Conditioning Emissions = Ash Conditioner + Transfer of Material

Where:

Ash Conditioner = [EF (lbs/ton) x monthly fly ash processed (tons/mo)]; Control efficiency = 95% 2000 lbs/ton

Transfers = 2 x [EF (lbs/ton) x monthly conditioned ash processed (tons/mo)]; Control efficiency = 90% 2000 lbs/ton

Note that 2 transfers are considered, one for the drop from the condition to the building floor or truck and one for loading from the building floor to the truck.

Note that in order to use the control efficiencies identified above, the following conditions shall be met:

The screw conveyors and ash conditioner shall be enclosed and the integrity of the enclosures shall be maintained in accordance with manufacturer's recommendations and good engineering practices.

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- 1.1.2 Conditioned ash shall be unloaded from the ash conditioner inside an enclosed building.
- Whenever transfers of conditioned ash are made with the building door open, good engineering practices shall be utilized to minimize particulate matter emissions.

Monthly emissions shall be used in a rolling twelve month total to monitor compliance with the annual limitations. Each month a new twelve month total shall be calculated using the previous twelve months data.

1.2 The quantity of fly ash/conditioned product processed through the ash conditioning system and MACS building shall not exceed the above limitation (Colorado Construction Permit 01MR0683). The fly ash/conditioned product processed through the ash conditioning system and MACS building shall be monitored and recorded monthly.

Monthly quantities of material processed through the ash conditioning system and MACS building shall be used in a twelve month rolling total to monitor compliance with the annual limitations. Each month a new twelve month total shall be calculated using the previous twelve months data.

1.3 Opacity of emissions from the ash conditioner and the MACS building shall not exceed 20% (Colorado Regulation No. 1, Section II.A.1). In the absence of credible evidence to the contrary, compliance with the 20% opacity limit shall be presumed, provided the requirements in Conditions 1.1.1, 1.1.2 and 1.1.3 are met.

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# 2. F001 - Fugitive Particulate Matter Emissions from Transport, Storage and Blending Operations

Parameter	Permit	Limitations Compliance		Monitoring		
	Condition Number	Short Term	n Long Term	Emission Factor	Method	Interval
PM	2.1.	N/A	18.7 tons/yr	See Appendix G	See Condi	tion 2.1.
$PM_{10}$			6.22 tons/yr			
Conditioned Ash, Bottom Ash and Rock	2.2.	N/A	120,000 tons/yr	N/A	Recordkeeping	Monthly
Fugitive Particulate Control Plan	2.3, 2.4.	N/A	N/A	N/A	Certification	Semi- Annually

2.1 Particulate Matter (PM and PM<sub>10</sub>) emissions from transport storage and blending operations shall not exceed the above limitations (Colorado Construction Permit 01MR0683). In the absence of credible evidence to the contrary, compliance with the PM and PM<sub>10</sub> emission limitations shall be presumed, provided the requirements in Conditions 2.4.1 through 2.4.7 are met and that the processing limit identified in Condition 2.2 is met.

Note that these emission limitations are based on the emission factors identified in Appendix G of this permit.

- 2.2 The quantity of conditioned ash, bottom ash and rock processed shall not exceed the above limitations (Colorado Construction Permit 01MR0683, as modified under the provisions of Section I, Condition 1.3). Monthly quantities of conditioned ash, bottom ash and rock shall be determined using scales and company records as necessary. Monthly quantities of conditioned ash, bottom ash and rock shall be used in a twelve month rolling total to monitor compliance with annual limitations. Each month, a new twelve month total shall be calculated using the previous twelve months data.
- 2.3 A modification to the fugitive particulate matter control plan shall be required to be submitted if the Division determines that for this source or activity visible emissions are in excess of 20% opacity; or visible emissions are being transported off the property; or if this source or activity is operating with emissions that create a nuisance. The control plan shall be submitted to the Division within the time period specified by the Division (Colorado Regulation No. 1, Section III.D.1.c).
- 2.4 The following control measures shall be utilized to minimize fugitive particulate emissions from ash handling and disposal (as provided for under the provisions of Section I, Condition 1.3 and Colorado Regulation No. 3, Part A, Section I.B.36.h and Part C, Section III.B.7):
  - 2.4.1 Material stockpiles shall be watered as necessary to control fugitive particulate matter emissions. Materials shall be sprayed with water, as necessary, during material loading into trucks to control fugitive particulate matter emissions.

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- 2.4.2 The plant entryway, truck service roads, and material handling areas shall be watered as necessary to control fugitive particulate matter emissions.
- 2.4.3 Vehicle speed on haul roads and service roads shall be restricted to 20 miles per hour. Speed limit signs shall be posted.
- 2.4.4 Dry fly ash shall not be stored in bulk open stockpiles.
- 2.4.5 Trucks transporting dry fly ash shall be fully covered to prevent emissions.
- 2.4.6 All active unpaved haul roads used by the permittee shall be watered daily to reduce visible emissions. Daily watering is not required when no haul trucks are using the unpaved roads, following rain or snow events that provide sufficient moisture to control fugitive dust, and when the application of water creates a safety hazard due to ice formation on the roads. Chemical stabilization of the unpaved road surfaces can also be used to reduce the need for daily watering.
- 2.4.7 The active haul roads used by the permittee shall be inspected on a daily basis, and any spillage of materials shall be cleaned up as soon as practical to minimize fugitive particulate matter emissions. Daily inspections are not required when no haul trucks are using the haul roads.

#### 3. SH001 - Son Haul Ash Processing Operations

Parameter	Permit	Lir	nitations	Compliance	Monite	oring
	Condition Number	Short Terr	n Long Term	Emission Factor	Method	Interval
PM	3.1.	N/A	0.51 ton per year	See Appendix G	See Cond	ition 3.1.
$PM_{10}$			0.24 ton per year			
Processing of bottom ash	3.2.	N/A	35,000 tons per year	N/A	Recordkeeping	Monthly
Consumption of Diesel Fuel No. 2	3.3	N/A	5,250 gallons per year	N/A	Recordkeeping	Semi- Annually
NSPS Subpart IIII	3.4	following specontent shall and Have a index of 40 or aromatic com	d shall meet the ecifications: Sulfur not exceed 15 ppm minimum cetane r Have a maximum apound content of the Emission limits w.		Recordkeeping	Semi- Annually
Opacity	3.5	Not to	Exceed 20%	N/A	Opacity	Semi- Annually

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Parameter	Permit	Limitations	Compliance	Monitoring	
	Condition Number	Short Term Long Term	Emission Factor	Method	Interval
MACT ZZZZ	3.6	Same as 3.4		Same as 3.4	Semi- Annually

- 3.1 Particulate Matter (PM and PM<sub>10</sub>) emissions from the screening operations shall not exceed the above limitations (Colorado Construction Permit 09PO0942). In the absence of credible evidence to the contrary, compliance with the PM and PM<sub>10</sub> emission limitations shall be presumed, provided the requirements in Conditions 3.1.1 and 3.2 are met and that the processing limit identified in Condition 3.2 is met.
  - Spray bars and enclosures shall be used if material moisture content is insufficient to control particulate emissions

Note that these emission limitations are based on the emission factors identified in Appendix G of this permit.

- 3.2 The quantity of conditioned ash, bottom ash and rock processed shall not exceed the above limitations (Colorado Construction Permit 09PO0942). Monthly quantities of conditioned ash, bottom ash and rock shall be determined using scales and company records as necessary. Monthly quantities of conditioned ash, bottom ash and rock shall be used in a twelve month rolling total to monitor compliance with annual limitations. Each month, a new twelve month total shall be calculated using the previous twelve months data.
- 3.3 This source shall be limited to processing and fuel use rates as listed below and all other activities, operational rates and numbers of equipment as stated in the application. Annual records of the actual production rate shall be maintained by the applicant and made available to the Division for inspection upon request.

Consumption of Diesel Fuel No. 2 for combustion in the engine shall not exceed 5,250 gallons per year.

- 3.4 Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (CI ICE) including, but not limited to, the following:
  - Emissions of Non-Methane Hydrocarbons and Nitrogen Oxides combined shall not a. exceed 7.50 grams per kilowatt-hour.
  - Emissions of Carbon Monoxide shall not exceed 5.00 grams per kilowatt-hour. b.
  - Emissions of Particulate Matter shall not exceed 0.40 gram per kilowatt-hour. c.

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- d. All fuel used shall meet the following specifications:
  - (1) Sulfur content shall not exceed 15 ppm.
  - Have a minimum cetane index of 40 or have a maximum aromatic (2) compound content of 35% by volume.

Compliance shall be demonstrated by maintaining copies of the fuel specifications provided by the supplier on-site or in a readily accessible location and made available to the Division for inspection upon request.

- All engines and control devices must be installed, configured, operated, and maintained e. according to the specifications and instructions provided by the engine manufacturer.
- f. Diesel particulate filter (if used) must be installed with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached.
- This source is also subject to the following requirements of Regulation No. 6, Part A, g. Subpart A, General Provisions:
  - a) At all times, including periods of start-up, shutdown, and malfunction, the facility and control equipment shall, to the extent practicable, be maintained and operated in a manner consistent with good air pollution control practices for minimizing emissions. Determination of whether or not acceptable operating and maintenance procedures are being used will be based on information available to the Division, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. (Reference: Regulation No. 6, Part A. General Provisions from 40 CFR 60.11
  - b) No article, machine, equipment or process shall be used to conceal an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. (§60.12)
  - c) Written notification of construction and initial startup dates shall be submitted to the Division as required under §60.7.
  - d) Records of startups, shutdowns, and malfunctions shall be maintained, as required under §60.7.
  - e) Performance tests shall be conducted as required under §60.8.
- 3.5 Opacity of emissions from the equipment shall not exceed 20% (Colorado Regulation No. 1, Section II.A.1). In the absence of credible evidence to the contrary, compliance with the 20% opacity limit shall be presumed, provided the requirements in Conditions 3.1 and 3.2 are met.

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This engine is subject to the requirements in 40 CFR Part 63 Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE), however, the engine meets the provisions of § 63.6590(c) Stationary RICE subject to Regulations under 40 CFR Part 60, which states: An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under this part. This engine meets the provisions of (c)(7) which covers: A new or reconstructed compression ignition (CI) stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions. Since this source meets IIII requirements it also meets ZZZZ requirements. These requirements included in this Condition 3.6 are only federally enforceable. As of the date of revised permit issuance, the requirements in 40 CFR Part 63 Subpart ZZZZ promulgated on August 20, 2010 have not been adopted into Colorado Regulation No. 8, Part E by the Division and are therefore not state-enforceable.

#### **SECTION III - Permit Shield**

Regulation No. 3, 5 CCR 1001-5, Part C, §§ I.A.4, V.D. & XIII.B; § 25-7-114.4(3)(a), C.R.S.

#### 1. **Specific Non-Applicable Requirements**

Based on the information available to the Division and supplied by the applicant, the following parameters and requirements have been specifically identified as non-applicable to the facility to which this permit has been issued. This shield does not protect the source from any violations that occurred prior to or at the time of permit issuance. In addition, this shield does not protect the source from any violations that occur as a result of any modifications or reconstruction on which construction commenced prior to permit issuance.

No requirements have been specifically identified as non-applicable for this facility.

#### 2. **General Conditions**

Compliance with this Operating Permit shall be deemed compliance with all applicable requirements specifically identified in the permit and other requirements specifically identified in the permit as not applicable to the source. This permit shield shall not alter or affect the following:

- 2.1 The provisions of §§ 25-7-112 and 25-7-113, C.R.S., or § 303 of the federal act, concerning enforcement in cases of emergency;
- 2.2 The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
- 2.3 The applicable requirements of the federal Acid Rain Program, consistent with § 408(a) of the federal act:
- 2.4 The ability of the Air Pollution Control Division to obtain information from a source pursuant to § 25-7-111(2)(I), C.R.S., or the ability of the Administrator to obtain information pursuant to § 114 of the federal act;
- 2.5 The ability of the Air Pollution Control Division to reopen the Operating Permit for cause pursuant to Regulation No. 3, Part C, § XIII.
- 2.6 Sources are not shielded from terms and conditions that become applicable to the source subsequent to permit issuance.

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#### **3. Streamlined Conditions**

The following applicable requirements have been subsumed within this operating permit using the pertinent streamlining procedures approved by the U.S. EPA. For purposes of the permit shield, compliance with the listed permit conditions will also serve as a compliance demonstration for purposes of the associated subsumed requirements.

No conditions have been streamlined.

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#### SECTION IV - General Permit Conditions ver 11/16/10

#### 1. **Administrative Changes**

#### Regulation No. 3, 5 CCR 1001-5, Part A, § III.

The permittee shall submit an application for an administrative permit amendment to the Division for those permit changes that are described in Regulation No. 3, Part A, § I.B.1. The permittee may immediately make the change upon submission of the application to the Division.

#### 2. **Certification Requirements**

#### Regulation No. 3, 5 CCR 1001-5, Part C, §§ III.B.9., V.C.16.a.& e. and V.C.17.

- Any application, report, document and compliance certification submitted to the Air Pollution Control Division pursuant to Regulation No. 3 or the Operating Permit shall contain a certification by a responsible official of the truth, accuracy and completeness of such form, report or certification stating that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.
- b. All compliance certifications for terms and conditions in the Operating Permit shall be submitted to the Air Pollution Control Division at least annually unless a more frequent period is specified in the applicable requirement or by the Division in the Operating Permit.
- Compliance certifications shall contain: c.
  - (i) the identification of each permit term and condition that is the basis of the certification;
  - (ii) the compliance status of the source;
  - whether compliance was continuous or intermittent; (iii)
  - method(s) used for determining the compliance status of the source, currently and over the reporting (iv) period; and
  - such other facts as the Air Pollution Control Division may require to determine the compliance status of the (v) source.
- d. All compliance certifications shall be submitted to the Air Pollution Control Division and to the Environmental Protection Agency at the addresses listed in Appendix D of this Permit.
- If the permittee is required to develop and register a risk management plan pursuant to § 112(r) of the federal act, the e. permittee shall certify its compliance with that requirement; the Operating Permit shall not incorporate the contents of the risk management plan as a permit term or condition.

#### 3. **Common Provisions**

#### Common Provisions Regulation, 5 CCR 1001-2 §§ II.A., II.B., II.C., II.E., II.F., II.I, and II.J

To Control Emissions Leaving Colorado a.

> When emissions generated from sources in Colorado cross the State boundary line, such emissions shall not cause the air quality standards of the receiving State to be exceeded, provided reciprocal action is taken by the receiving State.

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#### b. **Emission Monitoring Requirements**

The Division may require owners or operators of stationary air pollution sources to install, maintain, and use instrumentation to monitor and record emission data as a basis for periodic reports to the Division.

#### **Performance Testing** c.

The owner or operator of any air pollution source shall, upon request of the Division, conduct performance test(s) and furnish the Division a written report of the results of such test(s) in order to determine compliance with applicable emission control regulations.

Performance test(s) shall be conducted and the data reduced in accordance with the applicable reference test methods unless the Division:

- (i) specifies or approves, in specific cases, the use of a test method with minor changes in methodology;
- (ii) approves the use of an equivalent method;
- (iii) approves the use of an alternative method the results of which the Division has determined to be adequate for indicating where a specific source is in compliance; or
- (iv) waives the requirement for performance test(s) because the owner or operator of a source has demonstrated by other means to the Division's satisfaction that the affected facility is in compliance with the standard. Nothing in this paragraph shall be construed to abrogate the Commission's or Division's authority to require testing under the Colorado Revised Statutes, Title 25, Article 7, and pursuant to regulations promulgated by the Commission.

Compliance test(s) shall be conducted under such conditions as the Division shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Division such records as may be necessary to determine the conditions of the performance test(s). Operations during period of startup, shutdown, and malfunction shall not constitute representative conditions of performance test(s) unless otherwise specified in the applicable standard.

The owner or operator of an affected facility shall provide the Division thirty days prior notice of the performance test to afford the Division the opportunity to have an observer present. The Division may waive the thirty day notice requirement provided that arrangements satisfactory to the Division are made for earlier testing.

The owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:

- (i) Sampling ports adequate for test methods applicable to such facility;
- (ii) Safe sampling platform(s);
- (iii) Safe access to sampling platform(s); and
- (iv) Utilities for sampling and testing equipment.

Each performance test shall consist of at least three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic mean of results of at least three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances beyond the owner or operator's control, compliance may, upon the Division's approval, be determined using the arithmetic mean of the results of the two other runs.

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Nothing in this section shall abrogate the Division's authority to conduct its own performance test(s) if so warranted.

d. Affirmative Defense Provision for Excess Emissions during Malfunctions

Note that until such time as the U.S. EPA approves this provision into the Colorado State Implementation Plan (SIP), it shall be enforceable only by the State.

An affirmative defense to a claim of violation under these regulations is provided to owners and operators for civil penalty actions for excess emissions during periods of malfunction. To establish the affirmative defense and to be relieved of a civil penalty in any action to enforce an applicable requirement, the owner or operator of the facility must meet the notification requirements below in a timely manner and prove by a preponderance of evidence that:

- (i) The excess emissions were caused by a sudden, unavoidable breakdown of equipment, or a sudden, unavoidable failure of a process to operate in the normal or usual manner, beyond the reasonable control of the owner or operator;
- (ii) The excess emissions did not stem from any activity or event that could have reasonably been foreseen and avoided, or planned for, and could not have been avoided by better operation and maintenance practices;
- (iii) Repairs were made as expeditiously as possible when the applicable emission limitations were being exceeded;
- (iv) The amount and duration of the excess emissions (including any bypass) were minimized to the maximum extent practicable during periods of such emissions;
- (v) All reasonably possible steps were taken to minimize the impact of the excess emissions on ambient air quality;
- (vi) All emissions monitoring systems were kept in operation (if at all possible);
- (vii) The owner or operator's actions during the period of excess emissions were documented by properly signed, contemporaneous operating logs or other relevant evidence;
- (viii) The excess emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance;
- (ix) At all times, the facility was operated in a manner consistent with good practices for minimizing emissions. This section is intended solely to be a factor in determining whether an affirmative defense is available to an owner or operator, and shall not constitute an additional applicable requirement; and
- (x) During the period of excess emissions, there were no exceedances of the relevant ambient air quality standards established in the Commissions' Regulations that could be attributed to the emitting source.

The owner or operator of the facility experiencing excess emissions during a malfunction shall notify the division verbally as soon as possible, but no later than noon of the Division's next working day, and shall submit written notification following the initial occurrence of the excess emissions by the end of the source's next reporting period. The notification shall address the criteria set forth above.

The Affirmative Defense Provision contained in this section shall not be available to claims for injunctive relief.

The Affirmative Defense Provision does not apply to failures to meet federally promulgated performance standards or emission limits, including, but not limited to, new source performance standards and national emission standards for hazardous air pollutants. The affirmative defense provision does not apply to state implementation plan (sip) limits or permit limits that have been set taking into account potential emissions during malfunctions, including, but not necessarily limited to, certain limits with 30-day or longer averaging times, limits that indicate they apply during malfunctions, and limits that indicate they apply at all times or without exception.

#### e. Circumvention Clause

A person shall not build, erect, install, or use any article, machine, equipment, condition, or any contrivance, the use of which, without resulting in a reduction in the total release of air pollutants to the atmosphere, reduces or conceals an emission which would otherwise constitute a violation of this regulation. No person shall circumvent this regulation by using more openings than is considered normal practice by the industry or activity in question.

#### f. Compliance Certifications

For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard in the Colorado State Implementation Plan, nothing in the Colorado State Implementation Plan shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed. Evidence that has the effect of making any relevant standard or permit term more stringent shall not be credible for proving a violation of the standard or permit term.

When compliance or non-compliance is demonstrated by a test or procedure provided by permit or other applicable requirement, the owner or operator shall be presumed to be in compliance or non-compliance unless other relevant credible evidence overcomes that presumption.

#### g. Affirmative Defense Provision for Excess Emissions During Startup and Shutdown

An affirmative defense is provided to owners and operators for civil penalty actions for excess emissions during periods of startup and shutdown. To establish the affirmative defense and to be relieved of a civil penalty in any action to enforce an applicable requirement, the owner or operator of the facility must meet the notification requirements below in a timely manner and prove by a preponderance of the evidence that:

- (i) The periods of excess emissions that occurred during startup and shutdown were short and infrequent and could not have been prevented through careful planning and design;
- (ii) The excess emissions were not part of a recurring pattern indicative of inadequate design, operation or maintenance;
- (iii) If the excess emissions were caused by a bypass (an intentional diversion of control equipment), then the bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
- (iv) The frequency and duration of operation in startup and shutdown periods were minimized to the maximum extent practicable;
- (v) All possible steps were taken to minimize the impact of excess emissions on ambient air quality;
- (vi) All emissions monitoring systems were kept in operation (if at all possible);
- (vii) The owner or operator's actions during the period of excess emissions were documented by properly signed, contemporaneous operating logs or other relevant evidence; and,
- (viii) At all times, the facility was operated in a manner consistent with good practices for minimizing emissions. This subparagraph is intended solely to be a factor in determining whether an affirmative defense is available to an owner or operator, and shall not constitute an additional applicable requirement.

The owner or operator of the facility experiencing excess emissions during startup and shutdown shall notify the Division verbally as soon as possible, but no later than two (2) hours after the start of the next working day, and shall submit written quarterly notification following the initial occurrence of the excess emissions. The notification shall address the criteria set forth above.

The Affirmative Defense Provision contained in this section shall not be available to claims for injunctive relief.

The Affirmative Defense Provision does not apply to State Implementation Plan provisions or other requirements that derive from new source performance standards or national emissions standards for hazardous air pollutants, or any other federally enforceable performance standard or emission limit with an averaging time greater than twenty-four hours. In addition, an affirmative defense cannot be used by a single source or small group of sources where the excess emissions have the potential to cause an exceedance of the ambient air quality standards or Prevention of Significant Deterioration (PSD) increments.

In making any determination whether a source established an affirmative defense, the Division shall consider the information within the notification required above and any other information the Division deems necessary, which may include, but is not limited to, physical inspection of the facility and review of documentation pertaining to the maintenance and operation of process and air pollution control equipment.

## 4. Compliance Requirements

#### Regulation No. 3, 5 CCR 1001-5, Part C, §§ III.C.9., V.C.11. & 16.d. and § 25-7-122.1(2), C.R.S.

- a. The permittee must comply with all conditions of the Operating Permit. Any permit noncompliance relating to federally-enforceable terms or conditions constitutes a violation of the federal act, as well as the state act and Regulation No. 3. Any permit noncompliance relating to state-only terms or conditions constitutes a violation of the state act and Regulation No. 3, shall be enforceable pursuant to state law, and shall not be enforceable by citizens under § 304 of the federal act. Any such violation of the federal act, the state act or regulations implementing either statute is grounds for enforcement action, for permit termination, revocation and reissuance or modification or for denial of a permit renewal application.
- b. It shall not be a defense for a permittee in an enforcement action or a consideration in favor of a permittee in a permit termination, revocation or modification action or action denying a permit renewal application that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.
- c. The permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of any request by the permittee for a permit modification, revocation and reissuance, or termination, or any notification of planned changes or anticipated noncompliance does not stay any permit condition, except as provided in §§ X. and XI. of Regulation No. 3, Part C.
- d. The permittee shall furnish to the Air Pollution Control Division, within a reasonable time as specified by the Division, any information that the Division may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Division copies of records required to be kept by the permittee, including information claimed to be confidential. Any information subject to a claim of confidentiality shall be specifically identified and submitted separately from information not subject to the claim.
- e. Any schedule for compliance for applicable requirements with which the source is not in compliance at the time of permit issuance shall be supplemental, and shall not sanction noncompliance with, the applicable requirements on which it is based.
- f. For any compliance schedule for applicable requirements with which the source is not in compliance at the time of permit issuance, the permittee shall submit, at least every 6 months unless a more frequent period is specified in the applicable requirement or by the Air Pollution Control Division, progress reports which contain the following:
  - (i) dates for achieving the activities, milestones, or compliance required in the schedule for compliance, and dates when such activities, milestones, or compliance were achieved; and
  - (ii) an explanation of why any dates in the schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

g. The permittee shall not knowingly falsify, tamper with, or render inaccurate any monitoring device or method required to be maintained or followed under the terms and conditions of the Operating Permit.

#### 5. Emergency Provisions

#### Regulation No. 3, 5 CCR 1001-5, Part C, § VII.E

An emergency means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed the technology-based emission limitation under the permit due to unavoidable increases in emissions attributable to the emergency. "Emergency" does not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error. An emergency constitutes an affirmative defense to an enforcement action brought for noncompliance with a technology-based emission limitation if the permittee demonstrates, through properly signed, contemporaneous operating logs, or other relevant evidence that:

- a. an emergency occurred and that the permittee can identify the cause(s) of the emergency;
- b. the permitted facility was at the time being properly operated;
- c. during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and
- d. the permittee submitted oral notice of the emergency to the Air Pollution Control Division no later than noon of the next working day following the emergency, and followed by written notice within one month of the time when emissions limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

This emergency provision is in addition to any emergency or malfunction provision contained in any applicable requirement.

#### 6. Emission Controls for Asbestos

#### Regulation No. 8, 5 CCR 1001-10, Part B

The permittee shall not conduct any asbestos abatement activities except in accordance with the provisions of Regulation No. 8, Part B, "asbestos control."

## 7. Emissions Trading, Marketable Permits, Economic Incentives

#### Regulation No. 3, 5 CCR 1001-5, Part C, § V.C.13.

No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are specifically provided for in the permit.

# 8. Fee Payment

#### C.R.S §§ 25-7-114.1(6) and 25-7-114.7

- a. The permittee shall pay an annual emissions fee in accordance with the provisions of C.R.S. § 25-7-114.7. A 1% per month late payment fee shall be assessed against any invoice amounts not paid in full on the 91st day after the date of invoice, unless a permittee has filed a timely protest to the invoice amount.
- b. The permittee shall pay a permit processing fee in accordance with the provisions of C.R.S. § 25-7-114.7. If the Division estimates that processing of the permit will take more than 30 hours, it will notify the permittee of its estimate of what the actual charges may be prior to commencing any work exceeding the 30 hour limit.

The permittee shall pay an APEN fee in accordance with the provisions of C.R.S. § 25-7-114.1(6) for each APEN or revised APEN filed.

#### 9. **Fugitive Particulate Emissions**

#### Regulation No. 1, 5 CCR 1001-3, § III.D.1.

The permittee shall employ such control measures and operating procedures as are necessary to minimize fugitive particulate emissions into the atmosphere, in accordance with the provisions of Regulation No. 1, § III.D.1.

#### 10. **Inspection and Entry**

#### Regulation No. 3, 5 CCR 1001-5, Part C, § V.C.16.b.

Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Air Pollution Control Division, or any authorized representative, to perform the following:

- enter upon the permittee's premises where an Operating Permit source is located, or emissions-related activity is a. conducted, or where records must be kept under the terms of the permit;
- b. have access to, and copy, at reasonable times, any records that must be kept under the conditions of the permit;
- inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), C. practices, or operations regulated or required under the Operating Permit;
- sample or monitor at reasonable times, for the purposes of assuring compliance with the Operating Permit or d. applicable requirements, any substances or parameters.

#### **Minor Permit Modifications** 11.

#### Regulation No. 3, 5 CCR 1001-5, Part C, §§ X. & XI.

The permittee shall submit an application for a minor permit modification before making the change requested in the application. The permit shield shall not extend to minor permit modifications.

#### **New Source Review** 12.

#### Regulation No. 3, 5 CCR 1001-5, Part B

The permittee shall not commence construction or modification of a source required to be reviewed under the New Source Review provisions of Regulation No. 3, Part B, without first receiving a construction permit.

#### 13. No Property Rights Conveyed

#### Regulation No. 3, 5 CCR 1001-5, Part C, § V.C.11.d.

This permit does not convey any property rights of any sort, or any exclusive privilege.

#### 14. Odor

#### Regulation No. 2, 5 CCR 1001-4, Part A

As a matter of state law only, the permittee shall comply with the provisions of Regulation No. 2 concerning odorous emissions.

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#### 15. Off-Permit Changes to the Source

# Regulation No. 3, 5 CCR 1001-5, Part C, § XII.B.

The permittee shall record any off-permit change to the source that causes the emissions of a regulated pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from the change, including any other data necessary to show compliance with applicable ambient air quality standards. The permittee shall provide contemporaneous notification to the Air Pollution Control Division and to the Environmental Protection Agency at the addresses listed in Appendix D of this Permit. The permit shield shall not apply to any off-permit change.

#### 16. Opacity

#### Regulation No. 1, 5 CCR 1001-3, §§ I., II.

The permittee shall comply with the opacity emissions limitation set forth in Regulation No. 1, §§ I.- II.

#### 17. Open Burning

### Regulation No. 9, 5 CCR 1001-11

The permittee shall obtain a permit from the Division for any regulated open burning activities in accordance with provisions of Regulation No. 9.

#### 18. Ozone Depleting Compounds

#### Regulation No. 15, 5 CCR 1001-17

The permittee shall comply with the provisions of Regulation No. 15 concerning emissions of ozone depleting compounds. Sections I., II.C., II.D., III. IV., and V. of Regulation No. 15 shall be enforced as a matter of state law only.

#### 19. Permit Expiration and Renewal

#### Regulation No. 3, 5 CCR 1001-5, Part C, §§ III.B.6., IV.C., V.C.2.

- a. The permit term shall be five (5) years. The permit shall expire at the end of its term. Permit expiration terminates the permittee's right to operate unless a timely and complete renewal application is submitted.
- b. Applications for renewal shall be submitted at least twelve months, but not more than 18 months, prior to the expiration of the Operating Permit. An application for permit renewal may address only those portions of the permit that require revision, supplementing, or deletion, incorporating the remaining permit terms by reference from the previous permit. A copy of any materials incorporated by reference must be included with the application.

#### 20. Portable Sources

#### Regulation No. 3, 5 CCR 1001-5, Part C, § II.D.

Portable Source permittees shall notify the Air Pollution Control Division at least 10 days in advance of each change in location.

#### 21. Prompt Deviation Reporting

#### Regulation No. 3, 5 CCR 1001-5, Part C, § V.C.7.b.

The permittee shall promptly report any deviation from permit requirements, including those attributable to malfunction conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken.

"Prompt" is defined as follows:

- a. Any definition of "prompt" or a specific timeframe for reporting deviations provided in an underlying applicable requirement as identified in this permit; or
- b. Where the underlying applicable requirement fails to address the time frame for reporting deviations, reports of deviations will be submitted based on the following schedule:
  - (i) For emissions of a hazardous air pollutant or a toxic air pollutant (as identified in the applicable regulation) that continue for more than an hour in excess of permit requirements, the report shall be made within 24 hours of the occurrence;
  - (ii) For emissions of any regulated air pollutant, excluding a hazardous air pollutant or a toxic air pollutant that continue for more than two hours in excess of permit requirements, the report shall be made within 48 hours; and
  - (iii) For all other deviations from permit requirements, the report shall be submitted every six (6) months, except as otherwise specified by the Division in the permit in accordance with paragraph 22.d. below.
- c. If any of the conditions in paragraphs b.i or b.ii above are met, the source shall notify the Division by telephone (303-692-3155) or facsimile (303-782-0278) based on the timetables listed above. [Explanatory note: Notification by telephone or facsimile must specify that this notification is a deviation report for an Operating Permit.] A written notice, certified consistent with General Condition 2.a. above (Certification Requirements), shall be submitted within 10 working days of the occurrence. All deviations reported under this section shall also be identified in the 6-month report required above.

"Prompt reporting" does not constitute an exception to the requirements of "Emergency Provisions" for the purpose of avoiding enforcement actions.

#### 22. Record Keeping and Reporting Requirements

#### Regulation No. 3, 5 CCR 1001-5, Part A, § II.; Part C, §§ V.C.6., V.C.7.

- a. Unless otherwise provided in the source specific conditions of this Operating Permit, the permittee shall maintain compliance monitoring records that include the following information:
  - (i) date, place as defined in the Operating Permit, and time of sampling or measurements;
  - (ii) date(s) on which analyses were performed;
  - (iii) the company or entity that performed the analysis;
  - (iv) the analytical techniques or methods used;
  - (v) the results of such analysis; and
  - (vi) the operating conditions at the time of sampling or measurement.
- b. The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of the monitoring sample, measurement, report or application. Support information, for this purpose, includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the Operating Permit. With prior approval of the Air Pollution Control Division, the permittee may maintain any of the above records in a computerized form.
- c. Permittees must retain records of all required monitoring data and support information for the most recent twelve (12) month period, as well as compliance certifications for the past five (5) years on-site at all times. A permittee shall make available for the Air Pollution Control Division's review all other records of required monitoring data and support information required to be retained by the permittee upon 48 hours advance notice by the Division.

- d. The permittee shall submit to the Air Pollution Control Division all reports of any required monitoring at least every six (6) months, unless an applicable requirement, the compliance assurance monitoring rule, or the Division requires submission on a more frequent basis. All instances of deviations from any permit requirements must be clearly identified in such reports.
- e. The permittee shall file an Air Pollutant Emissions Notice ("APEN") prior to constructing, modifying, or altering any facility, process, activity which constitutes a stationary source from which air pollutants are or are to be emitted, unless such source is exempt from the APEN filing requirements of Regulation No. 3, Part A, § II.D. A revised APEN shall be filed annually whenever a significant change in emissions, as defined in Regulation No. 3, Part A, § II.C.2., occurs; whenever there is a change in owner or operator of any facility, process, or activity; whenever new control equipment is installed; whenever a different type of control equipment replaces an existing type of control equipment; whenever a permit limitation must be modified; or before the APEN expires. An APEN is valid for a period of five years. The five-year period recommences when a revised APEN is received by the Air Pollution Control Division. Revised APENs shall be submitted no later than 30 days before the five-year term expires. Permittees submitting revised APENs to inform the Division of a change in actual emission rates must do so by April 30 of the following year. Where a permit revision is required, the revised APEN must be filed along with a request for permit revision. APENs for changes in control equipment must be submitted before the change occurs. Annual fees are based on the most recent APEN on file with the Division.

#### 23. **Reopenings for Cause**

#### Regulation No. 3, 5 CCR 1001-5, Part C, § XIII.

- The Air Pollution Control Division shall reopen, revise, and reissue Operating Permits; permit reopenings and reissuance shall be processed using the procedures set forth in Regulation No. 3, Part C, § III., except that proceedings to reopen and reissue permits affect only those parts of the permit for which cause to reopen exists.
- b. The Division shall reopen a permit whenever additional applicable requirements become applicable to a major source with a remaining permit term of three or more years, unless the effective date of the requirements is later than the date on which the permit expires, or unless a general permit is obtained to address the new requirements; whenever additional requirements (including excess emissions requirements) become applicable to an affected source under the acid rain program; whenever the Division determines the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or whenever the Division determines that the permit must be revised or revoked to assure compliance with an applicable requirement.
- The Division shall provide 30 days' advance notice to the permittee of its intent to reopen the permit, except that a c. shorter notice may be provided in the case of an emergency.
- The permit shield shall extend to those parts of the permit that have been changed pursuant to the reopening and d. reissuance procedure.

#### 24. Section 502(b)(10) Changes

#### Regulation No. 3, 5 CCR 1001-5, Part C, § XII.A.

The permittee shall provide a minimum 7-day advance notification to the Air Pollution Control Division and to the Environmental Protection Agency at the addresses listed in Appendix D of this Permit. The permittee shall attach a copy of each such notice given to its Operating Permit.

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#### 25. Severability Clause

### Regulation No. 3, 5 CCR 1001-5, Part C, § V.C.10.

In the event of a challenge to any portion of the permit, all emissions limits, specific and general conditions, monitoring, record keeping and reporting requirements of the permit, except those being challenged, remain valid and enforceable.

#### 26. Significant Permit Modifications

#### Regulation No. 3, 5 CCR 1001-5, Part C, § III.B.2.

The permittee shall not make a significant modification required to be reviewed under Regulation No. 3, Part B ("Construction Permit" requirements) without first receiving a construction permit. The permittee shall submit a complete Operating Permit application or application for an Operating Permit revision for any new or modified source within twelve months of commencing operation, to the address listed in Item 1 in Appendix D of this permit. If the permittee chooses to use the "Combined Construction/Operating Permit" application procedures of Regulation No. 3, Part C, then the Operating Permit must be received prior to commencing construction of the new or modified source.

#### 27. Special Provisions Concerning the Acid Rain Program

#### Regulation No. 3, 5 CCR 1001-5, Part C, §§ V.C.1.b. & 8

- a. Where an applicable requirement of the federal act is more stringent than an applicable requirement of regulations promulgated under Title IV of the federal act, 40 Code of Federal Regulations (CFR) Part 72, both provisions shall be incorporated into the permit and shall be federally enforceable.
- b. Emissions exceeding any allowances that the source lawfully holds under Title IV of the federal act or the regulations promulgated thereunder, 40 CFR Part 72, are expressly prohibited.

#### 28. Transfer or Assignment of Ownership

## Regulation No. 3, 5 CCR 1001-5, Part C, § II.C.

No transfer or assignment of ownership of the Operating Permit source will be effective unless the prospective owner or operator applies to the Air Pollution Control Division on Division-supplied Administrative Permit Amendment forms, for reissuance of the existing Operating Permit. No administrative permit shall be complete until a written agreement containing a specific date for transfer of permit, responsibility, coverage, and liability between the permittee and the prospective owner or operator has been submitted to the Division.

#### 29. Volatile Organic Compounds

#### Regulation No. 7, 5 CCR 1001-9, §§ III & V.

The requirements in paragraphs a, b and e apply to sources located in an ozone non-attainment area or the Denver 1-hour ozone attainment/maintenance area. The requirements in paragraphs c and d apply statewide.

a. All storage tank gauging devices, anti-rotation devices, accesses, seals, hatches, roof drainage systems, support structures, and pressure relief valves shall be maintained and operated to prevent detectable vapor loss except when opened, actuated, or used for necessary and proper activities (e.g. maintenance). Such opening, actuation, or use shall be limited so as to minimize vapor loss.

Detectable vapor loss shall be determined visually, by touch, by presence of odor, or using a portable hydrocarbon analyzer. When an analyzer is used, detectable vapor loss means a VOC concentration exceeding 10,000 ppm. Testing shall be conducted as in Regulation No. 7, Section VIII.C.3.

b. Except when otherwise provided by Regulation No. 7, all volatile organic compounds, excluding petroleum liquids, transferred to any tank, container, or vehicle compartment with a capacity exceeding 212 liters (56 gallons), shall be

transferred using submerged or bottom filling equipment. For top loading, the fill tube shall reach within six inches of the bottom of the tank compartment. For bottom-fill operations, the inlet shall be flush with the tank bottom.

- The permittee shall not dispose of volatile organic compounds by evaporation or spillage unless Reasonably c. Available Control Technology (RACT) is utilized.
- No owner or operator of a bulk gasoline terminal, bulk gasoline plant, or gasoline dispensing facility as defined in d. Colorado Regulation No. 7, Section VI, shall permit gasoline to be intentionally spilled, discarded in sewers, stored in open containers, or disposed of in any other manner that would result in evaporation.
- Beer production and associated beer container storage and transfer operations involving volatile organic compounds e. with a true vapor pressure of less than 1.5 PSIA actual conditions are exempt from the provisions of paragraph b, above.

#### 30. **Wood Stoves and Wood burning Appliances**

#### Regulation No. 4, 5 CCR 1001-6

The permittee shall comply with the provisions of Regulation No. 4 concerning the advertisement, sale, installation, and use of wood stoves and wood burning appliances.

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# OPERATING PERMIT APPENDICES

- A INSPECTION INFORMATION
- **B MONITORING AND PERMIT DEVIATION REPORT**
- C COMPLIANCE CERTIFICATION REPORT
- **D-NOTIFICATION ADDRESSES**
- **E PERMIT ACRONYMS**
- F PERMIT MODIFICATIONS
- G EMISSION FACTORS FOR SOURCES OF FUGITIVE PARTICULATE MATTER EMISSIONS

# \*DISCLAIMER:

None of the information found in these Appendices shall be considered to be State or Federally enforceable, except as otherwise provided in the permit, and is presented to assist the source, permitting authority, inspectors, and citizens.

#### **APPENDIX A**

# **Inspection Information**

#### **Directions to Plant:**

BMTI operations are located on the PSCo Pawnee power plant property which is located at 14940 County Road 24.

# **Safety Equipment Required:**

Hard Hat Safety Shoes Safety Glasses

# **Facility Plot Plan:**

Figure 1 (following page) shows the plot plan as submitted on January 31, 2003 with the source's Title V Operating Permit Application.

# **List of Insignificant Activities:**

The following list of insignificant activities was provided by the source to assist in the understanding of the facility layout. Since there is no requirement to update such a list, activities may have changed since the last filing.

<u>In-house experimental and analytical laboratory equipment (Reg 3 Part C.II.E.3.i)</u>

• In-house QA/QC lab

### Chemical storage tanks or containers < 500 gal (Reg 3 Part C.II.E.3.n)

- Consumer-type chemical storage containers in consumer quantity sizes storing miscellaneous cleaning and maintenance chemicals (e.g. lubricants, WD-40)
- Petroleum products including hydraulic oil, grease, gasoline, fuel oil, engine additives, etc. for vehicle and equipment upkeep and operation (all in 55 gallon drum containers or smaller)

Operations involving acetylene, butane, propane or other flame cutting torches (Reg 3 Part C.II.E.3.kk)

• Torch and welding equipment

Venting of compressed natural gas, butane or propane gas cylinders, < 1 gal (Reg 3, Part C.II.E.3.zz)

• Small portable propane bottles for individual heating use

Fuel storage and dispensing equipment in ozone attainment areas throughput < 400 gal/day averaged over 30 days (Reg 3 Part C.II.E.3.ccc)

• Diesel fuel storage tank (500 gal)

Chemical storage areas where closed containers are used with storage capacities not exceeding 5,000 gallons total (Reg 3 Part C.II.E.3.mm)

Two 2,000 gallon tanks and one 1,000 gallon tank for storage of magnesium chloride used for deicing roads in winter

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#### APPENDIX B

#### **Reporting Requirements and Definitions**

with codes ver 2/20/07

Please note that, pursuant to 113(c)(2) of the federal Clean Air Act, any person who knowingly:

- (A) makes any false material statement, representation, or certification in, or omits material information from, or knowingly alters, conceals, or fails to file or maintain any notice, application, record, report, plan, or other document required pursuant to the Act to be either filed or maintained (whether with respect to the requirements imposed by the Administrator or by a State);
- (B) fails to notify or report as required under the Act; or
- (C) falsifies, tampers with, renders inaccurate, or fails to install any monitoring device or method required to be maintained or followed under the Act shall, upon conviction, be punished by a fine pursuant to title 18 of the United States Code, or by imprisonment for not more than 2 years, or both. If a conviction of any person under this paragraph is for a violation committed after a first conviction of such person under this paragraph, the maximum punishment shall be doubled with respect to both the fine and imprisonment.

The permittee must comply with all conditions of this operating permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

The Part 70 Operating Permit program requires three types of reports to be filed for all permits. All required reports must be certified by a responsible official.

# **Report #1: Monitoring Deviation Report** (due at least every six months)

For purposes of this operating permit, the Division is requiring that the monitoring reports are due every six months unless otherwise noted in the permit. All instances of deviations from permit monitoring requirements must be clearly identified in such reports.

For purposes of this operating permit, monitoring means any condition determined by observation, by data from any monitoring protocol, or by any other monitoring which is required by the permit as well as the recordkeeping associated with that monitoring. This would include, for example, fuel use or process rate monitoring, fuel analyses, and operational or control device parameter monitoring.

## **Report #2: Permit Deviation Report (must be reported "promptly")**

In addition to the monitoring requirements set forth in the permits as discussed above, each and every requirement of the permit is subject to deviation reporting. The reports must address deviations from permit requirements, including those attributable to malfunctions as defined in this Appendix, the probable cause of

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such deviations, and any corrective actions or preventive measures taken. All deviations from any term or condition of the permit are required to be summarized or referenced in the annual compliance certification.

For purposes of this operating permit, "malfunction" shall refer to both emergency conditions and malfunctions. Additional discussion on these conditions is provided later in this Appendix.

For purposes of this operating permit, the Division is requiring that the permit deviation reports are due as set forth in General Condition 21. Where the underlying applicable requirement contains a definition of prompt or otherwise specifies a time frame for reporting deviations, that definition or time frame shall govern. For example, quarterly Excess Emission Reports required by an NSPS or Regulation No. 1, Section IV.

In addition to the monitoring deviations discussed above, included in the meaning of deviation for the purposes of this operating permit are any of the following:

- (1) A situation where emissions exceed an emission limitation or standard contained in the permit;
- (2) A situation where process or control device parameter values demonstrate that an emission limitation or standard contained in the permit has not been met;
- (3) A situation in which observations or data collected demonstrates noncompliance with an emission limitation or standard or any work practice or operating condition required by the permit; or,
- (4) A situation in which an excursion or exceedance as defined in 40CFR Part 64 (the Compliance Assurance Monitoring (CAM) Rule) has occurred. (only if the emission point is subject to CAM)

For reporting purposes, the Division has combined the Monitoring Deviation Report with the Permit Deviation Report. All deviations shall be reported using the following codes:

1 = **Standard:** When the requirement is an emission limit or standard **2 = Process:** When the requirement is a production/process limit

3 = Monitor: When the requirement is monitoring 4 = Test: When the requirement is testing

5 = Maintenance: When required maintenance is not performed
 6 = Record: When the requirement is recordkeeping
 7 = Report: When the requirement is reporting

**8 = CAM:** A situation in which an excursion or exceedance as defined in 40CFR Part 64 (the

Compliance Assurance Monitoring (CAM) Rule) has occurred.

**9 = Other:** When the deviation is not covered by any of the above categories

#### Report #3: Compliance Certification (annually, as defined in the permit)

Submission of compliance certifications with terms and conditions in the permit, including emission limitations, standards, or work practices, is required not less than annually.

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Compliance Certifications are intended to state the compliance status of each requirement of the permit over the certification period. They must be based, at a minimum, on the testing and monitoring methods specified in the permit that were conducted during the relevant time period. In addition, if the owner or operator knows of other material information (i.e. information beyond required monitoring that has been specifically assessed in relation to how the information potentially affects compliance status), that information must be identified and addressed in the compliance certification. The compliance certification must include the following:

- The identification of each term or condition of the permit that is the basis of the certification;
- Whether or not the method(s) used by the owner or operator for determining the compliance status with each permit term and condition during the certification period was the method(s) specified in the permit. Such methods and other means shall include, at a minimum, the methods and means required in the permit. If necessary, the owner or operator also shall identify any other material information that must be included in the certification to comply with section 113(c)(2) of the Federal Clean Air Act, which prohibits knowingly making a false certification or omitting material information:
- The status of compliance with the terms and conditions of the permit, and whether compliance was continuous or intermittent. The certification shall identify each deviation and take it into account in the compliance certification. Note that not all deviations are considered violations.
- Such other facts as the Division may require, consistent with the applicable requirements to which the source is subject, to determine the compliance status of the source.

The Certification shall also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion or exceedance as defined under 40 CFR Part 64 (the Compliance Assurance Monitoring (CAM) Rule) has occurred. (only for emission points subject to CAM)

Note the requirement that the certification shall identify each deviation and take it into account in the compliance certification. Previously submitted deviation reports, including the deviation report submitted at the time of the annual certification, may be referenced in the compliance certification.

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For example, given the various emissions limitations and monitoring requirements to which a source may be subject, a deviation from one requirement may not be a deviation under another requirement which recognizes an exception and/or special circumstances relating to that same event.

# Startup, Shutdown, Malfunctions and Emergencies,

Understanding the application of Startup, Shutdown, Malfunctions and Emergency Provisions, is very important in both the deviation reports and the annual compliance certifications.

### Startup, Shutdown, and Malfunctions

Please note that exceedances of some New Source Performance Standards (NSPS) and Maximum Achievable Control Technology (MACT) standards that occur during Startup, Shutdown or Malfunctions may not be considered to be non-compliance since emission limits or standards often do not apply unless specifically stated in the NSPS. Such exceedances must, however, be reported as excess emissions per the NSPS/MACT rules and would still be noted in the deviation report. In regard to compliance certifications, the permittee should be confident of the information related to those deviations when making compliance determinations since they are subject to Division review. The concepts of Startup, Shutdown and Malfunctions also exist for Best Available Control Technology (BACT) sources, but are not applied in the same fashion as for NSPS and MACT sources.

### **Emergency Provisions**

Under the Emergency provisions of Part 70 certain operational conditions may act as an affirmative defense against enforcement action if they are properly reported.

### **DEFINITIONS**

**Malfunction** (NSPS) means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

**Malfunction** (SIP) means any sudden and unavoidable failure of air pollution control equipment or process equipment or unintended failure of a process to operate in a normal or usual manner. Failures that are primarily caused by poor maintenance, careless operation, or any other preventable upset condition or preventable equipment breakdown shall not be considered malfunctions.

**Emergency** means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

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### Monitoring and Permit Deviation Report - Part I

- 1. Following is the **required** format for the Monitoring and Permit Deviation report to be submitted to the Division as set forth in General Condition 21. The Table below must be completed for all equipment or processes for which specific Operating Permit terms exist.
- 2. Part II of this Appendix B shows the format and information the Division will require for describing periods of monitoring and permit deviations, or malfunction or emergency conditions as indicated in the Table below. One Part II Form must be completed for each Deviation. Previously submitted reports (e.g. EER's or malfunctions) may be referenced and the form need not be filled out in its entirety.

FACILITY NAME: Boral Material Techno	ologies, Inc. – Pawnee Station
OPERATING PERMIT NO: 03OPMR244	
REPORTING PERIOD:	(see first page of the permit for specific reporting period and dates)

Operating Permit Unit			ions Noted g Period? <sup>1</sup>	Deviation Code <sup>2</sup>	Malfuncti ency Co Reported Peri	l During
ID	Unit Description	YES	NO		YES	NO
MACS	Ash Tech Fly Ash Conditioning System, Model # M16 and Associated MACS Building					
F001	Fugitive Particulate Matter Emissions from Transport, Storage and Blending Operations. Portable blending operation consists of open feeder hoppers, open conveyors, and open screens (scalping screen and sizing screen).					
SH001	One (1) Powerscreen, Model: Turbochieftain, Serial No.: 6622411, 2-Deck vibrating screen, design feed rated at 60 tons per hour. Generator: one (1) Deutz, Model: BF4M2012, Serial No.: DIN/ISO30461FN, distillate fuel oil fired, 4-stroke, turbocharged, compression ignition, reciprocating internal combustion engine, heat input rated at 0.56 MMBTU per hour, output rated at 80 HP.					
	General Conditions					
	Insignificant Activities					

<sup>&</sup>lt;sup>1</sup> See previous discussion regarding what is considered to be a deviation. Determination of whether or not a deviation has occurred shall be based on a reasonable inquiry using readily available information.

1 = Standard: When the requirement is an emission limit or standard
2 = Process: When the requirement is a production/process limit

**3 = Monitor:** When the requirement is monitoring

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<sup>&</sup>lt;sup>2</sup>Use the following entries as appropriate:

**4 = Test:** When the requirement is testing

5 = Maintenance: When required maintenance is not performed
 6 = Record: When the requirement is recordkeeping
 7 = Report: When the requirement is reporting

**8 = CAM:** A situation in which an excursion or exceedance as defined in 40CFR Part 64 (the Compliance Assurance

Monitoring (CAM) Rule) has occurred.

**9 = Other:** When the deviation is not covered by any of the above categories

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	<b>Monitoring and Perm</b>	nit Deviation Repor	rt - Part II	
FACILITY NAME: OPERATING PERMIT NO: REPORTING PERIOD:	Boral Material Technol 03OPMR244	ologies, Inc Pawne	ee Station	
Is the deviation being claime	d as an:	Emergency	Malfunction	N/A
(For NSPS/MACT) Did the o	deviation occur during:	Startup	Shutdown	Malfunction
		Normal Operation		
OPERATING PERMIT UNI	T IDENTIFICATION:			
Operating Permit Condition	Number Citation			
Explanation of Period of Dev	<u>viation</u>			
Duration (start/stop date & ti	<u>me)</u>			
Action Taken to Correct the	<u>Problem</u>			
Measures Taken to Prevent a	Reoccurrence of the Pr	<u>roblem</u>		
Dates of Malfunctions/Emerg	gencies Reported (if app	olicable)		
Deviation Code		Division Code OA:		

# SEE EXAMPLE ON THE NEXT PAGE

# **EXAMPLE**

FACILITY NAME: Acme Corp.  OPERATING PERMIT NO: 96OPZZXXX				
REPORTING PERIOD: 1/1/04 - 6/30/06				
Is the deviation being claimed as an:	Emergency	_ Malfunction _	XX	N/A
(For NSPS/MACT) Did the deviation occur during:	Startup Normal Operation	Shutdown	_ Malfunct	ion
OPERATING PERMIT UNIT IDENTIFICATION:				
Asphalt Plant with a Scrubber for Particulate Contro	l - Unit XXX			
Operating Permit Condition Number Citation				
Section II, Condition 3.1 - Opacity Limitation				
Explanation of Period of Deviation				
Slurry Line Feed Plugged				
<u>Duration</u>				
START- 1730 4/10/06 END- 1800 4/10/06				
Action Taken to Correct the Problem				
Line Blown Out				
Measures Taken to Prevent Reoccurrence of the Pro	<u>blem</u>			
Replaced Line Filter				
Dates of Malfunction/Emergencies Reported (if appl	licable)			
5/30/06 to P. Carr, APCD				
Deviation Code	Division Code QA:			

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# **Monitoring and Permit Deviation Report - Part III**

# REPORT CERTIFICATION

SOURCE NAME: Boral Material Techno	ologies, Inc Pawnee Sta	ation
FACILITY IDENTIFICATION NUMBER	R: 0870011	
PERMIT NUMBER: 03OPM244		
REPORTING PERIOD:	_ (see first page of the	permit for specific reporting period and dates)
	Part A, Section I.B.38.	must be certified by a responsible official as This signed certification document must be
STATEMENT OF COMPLETENESS		
•	_	irety and, based on information and belief and information contained in this submitta
1-501(6), C.R.S., makes any false mater	rial statement, represe	who knowingly, as defined in Sub-Section 18- entation, or certification in this document is see with the provisions of Sub-Section 25-7
Printed or Typed Name		Title
Signature of Responsi	ible Official	Date Signed
Note: Deviation reports shall be subm permit. No copies need be sent to the U		at the address given in Appendix D of this

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### **APPENDIX C**

## **Required Format for Annual Compliance Certification Report**

Following is the format for the Compliance Certification report to be submitted to the Division and the U.S. **EPA** annually based on the effective date of the permit. The Table below must be completed for all equipment or processes for which specific Operating Permit terms exist.

FACILITY NAME: Boral Material Technologies, Inc Pawnee Station
OPERATING PERMIT NO: 03OPM244
REPORTING PERIOD:
I. Facility Status
During the entire reporting period, this source was in compliance with <b>ALL</b> terms and conditions contained in the Permit, each term and condition of which is identified and included by this reference. The method(s) used to determine compliance is/are the method(s) specified in the Permit.
With the possible exception of the deviations identified in the table below, this source was in compliance with all terms and conditions contained in the Permit, each term and condition of which is identified and included by this reference, during the entire reporting period. The method used to determine compliance for
each term and condition is the method specified in the Permit, unless otherwise indicated and described in the
deviation report(s). Note that not all deviations are considered violations.

Operating Permit Unit ID	Unit Description	Deviations Reported <sup>1</sup>		Monitoring Method per Permit? <sup>2</sup>		Was compliance continuous or intermittent? <sup>3</sup>	
		Previous	Current	YES	NO	Continuous	Intermittent
MACS	Ash Tech Fly Ash Conditioning System, Model # M16 and Associated MACS Building						
F001	Fugitive Particulate Matter Emissions from Transport, Storage and Blending Operations. Portable blending operation consists of open feeder hoppers, open conveyors, and open screens (scalping screen and sizing screen).						
SH001	One (1) Powerscreen, Model: Turbochieftain, Serial No.: 6622411, 2-Deck vibrating screen, design feed rated at 60 tons per hour. Generator: one (1) Deutz, Model:						

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Operating Permit Unit ID	Unit Description	Deviations Reported <sup>1</sup>				hod per or intermittent? <sup>3</sup>	
		Previous	Current	YES	NO	Continuous	Intermittent
	BF4M2012, Serial No.: DIN/ISO30461FN, distillate fuel oil fired, 4-stroke, turbocharged, compression ignition, reciprocating internal combustion engine, heat input rated at 0.56 MMBTU per hour, output rated at 80 HP.						
	General Conditions						
	Insignificant Activities 4						

<sup>&</sup>lt;sup>1</sup> If deviations were noted in a previous deviation report, put an "X" under "previous". If deviations were noted in the current deviation report (i.e. for the last six months of the annual reporting period), put an "X" under "current". Mark both columns if both apply.

### NOTE:

The Periodic Monitoring requirements of the Operating Permit program rule are intended to provide assurance that even in the absence of a continuous system of monitoring the Title V source can demonstrate whether it has operated in continuous compliance for the duration of the reporting period. Therefore, if a source 1) conducts all of the monitoring and recordkeeping required in its permit, even if such activities are done periodically and not continuously, and if 2) such monitoring and recordkeeping does not indicate non-compliance, and if 3) the Responsible Official is not aware of any credible evidence that indicates non-compliance, then the Responsible Official can certify that the emission point(s) in question were in continuous compliance during the applicable time period.

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<sup>&</sup>lt;sup>2</sup> Note whether the method(s) used to determine the compliance status with each term and condition was the method(s) specified in the permit. If it was not, mark "no" and attach additional information/explanation.

<sup>&</sup>lt;sup>3</sup> Note whether the compliance status with of each term and condition provided was continuous or intermittent. "Intermittent Compliance" can mean either that noncompliance has occurred or that the owner or operator has data sufficient to certify compliance only on an intermittent basis. Certification of intermittent compliance therefore does not necessarily mean that any noncompliance has occurred.

<sup>&</sup>lt;sup>4</sup> Compliance status for these sources shall be based on a reasonable inquiry using readily available information.

Agency at the addresses listed in Appendix D of this Permit.

II.	Status	for Accidental Release Prevention Program:	
	A.	This facility is subject is not subject to the particle Release Prevention Program (Section 112(r) of the Federal Clean Air	
	В.	If subject: The facility is is is is or requirements of section 112(r).	ompliance with all the
	approp	A Risk Management Plan will be priate authority and/or the designated central location by the required designated central location central loc	
III.	Certifi	ication	
Colora the do	ndo Reg cuments e reviev nable in	on for the Annual Compliance Certification must be certified by a responding to the Annual Compliance Certification must be certified by a responding submitted.  The section I.B.38. This signed certification documes being submitted.  The section in its entirety and, based on information and the section of	nent must be packaged with  and belief formed after
C.R.S	., make	hat the Colorado Statutes state that any person who knowingly, a es any false material statement, representation, or certification in t r and may be punished in accordance with the provisions of § 25-7	his document is guilty of a
		Printed or Typed Name	Title
		Signature	Date Signed
NOTE:	All com	apliance certifications shall be submitted to the Air Pollution Control Division and	to the Environmental Protection

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### APPENDIX D

### **Notification Addresses**

#### **Air Pollution Control Division** 1.

Colorado Department of Public Health and Environment Air Pollution Control Division **Operating Permits Unit** APCD-SS-B1 4300 Cherry Creek Drive S. Denver, CO 80246-1530

**ATTN: Jim King** 

#### **United States Environmental Protection Agency** 2.

### Compliance Notifications:

Office of Enforcement, Compliance and Environmental Justice Mail Code 8ENF-T U.S. Environmental Protection Agency, Region VIII 1595 Wynkoop Street Denver, CO 80202-1129

### Permit Modifications, Off Permit Changes:

Office of Partnerships and Regulatory Assistance Air and Radiation Programs, 8P-AR U.S. Environmental Protection Agency, Region VIII 1595 Wynkoop Street Denver, CO 80202-1129

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### APPENDIX E

### **Permit Acronyms**

**Factors** 

### Listed Alphabetically:

AIRS -	Aerometric Information Retrieval System
AP-42 -	EPA Document Compiling Air Pollutant Emission

APEN - Air Pollution Emission Notice (State of Colorado) APCD - Air Pollution Control Division (State of Colorado)

ASTM - American Society for Testing and Materials

BACT - Best Available Control Technology

BTU - British Thermal Unit

CAA - Clean Air Act (CAAA = Clean Air Act Amendments)

CCR - Colorado Code of Regulations CEM - Continuous Emissions Monitor

CF - Cubic Feet (SCF = Standard Cubic Feet)

CFR - Code of Federal Regulations

CO - Carbon Monoxide

COM - Continuous Opacity Monitor CRS - Colorado Revised Statute

EF - Emission Factor

EPA - Environmental Protection Agency FI - Fuel Input Rate in Lbs/MMBtu

FR - Federal Register

G - Grams Gal - Gallon

GPM - Gallons per Minute HAPs - Hazardous Air Pollutants

HP - Horsepower

HP-HR - Horsepower Hour (G/HP-HR = Grams per Horsepower Hour)

LAER - Lowest Achievable Emission Rate

LBS - Pounds
M - Thousand
MM - Million

MMscf - Million Standard Cubic Feet

MMscfd - Million Standard Cubic Feet per Day

N/A or NA - Not Applicable NOx - Nitrogen Oxides

NESHAP - National Emission Standards for Hazardous Air Pollutants

NSPS - New Source Performance Standards
P - Process Weight Rate in Tons/Hr

PE - Particulate Emissions PM - Particulate Matter

PM<sub>10</sub> - Particulate Matter Under 10 Microns

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PSD -	Prevention	of Significant	Deterioration
100	I I C V CII LI OII	or biginite unit	Deterrorunon

Potential To Emit PTE -

Reasonably Available Control Technology RACT -

Source Classification Code SCC -

SCF -Standard Cubic Feet

SIC -Standard Industrial Classification

 $SO_2$  -Sulfur Dioxide TPY -Tons Per Year

Total Suspended Particulate TSP -Volatile Organic Compounds VOC -

# APPENDIX F

# **Permit Modifications**

DATE OF REVISION	SECTION NUMBER, CONDITION NUMBER	DESCRIPTION OF REVISION

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### APPENDIX G

### **Emission Factors For Sources of Fugitive Particulate Matter Emissions**

### Loading, Unloading and Blending

Emissions were estimated using emission factors from the AWMA Air Pollution Engineering Manual (Second Edition, 2000), Table 1, page 693, for coal processing:

PM = 0.2 lbs/ton transferred or conveyed  $PM_{10} = 0.072$  lbs/ton transferred or conveyed

 $PM_{10}$  is presumed to be 0.36 x PM. One transfer point was used to estimate emissions.

A control efficiency of 50% was used based on material used (wetted (conditioned)) fly ash and bottom ash that has a consistency of rock) and the blending site (a pit with natural barriers).

### Vehicle Travel on Unpaved Roads

NOTE: AP42 Emission equations have been revised for unpaved haul roads (Section 13.2.2) in 2006. Compliance with the fugitive emission limits in this permit are demonstrated through compliance with required fugitive emission control plan requirements and throughput levels as stated in condition 2.1. Since emission calculations are not required for compliance demonstrations a new emission limit will not be calculated based on the new haul road factor.

Emissions from travel on unpaved roads were estimated using emission factors from AP-42 (dated September 1998), Section 13.2.2 Unpaved Roads, as follows:

$$E = \frac{k \times (s/12)^{a} \times (W/3)^{b}}{(M/0.2)^{c}}$$

where: E = particulate emissions, in lbs/VMT

VMT = vehicle miles traveled per year

k = constant, dimensionless, see table below

a = constant, dimensionless, see table below

b = constant, dimensionless, see table below

c = constant dimensionless, see table below

s = silt content of road surface material, in % (PSCo used 6.6, per AP-42, Table 13.2.2-1, for municipal solid waste landfills)

W = mean weight of vehicle, in tons (per PSCo W = 28)

M = surface moisture content, % (PSCo used 1.45 %)

Constant	PM	$PM_{10}$
k	10	2.6
a	0.8	0.8
b	0.5	0.4
С	0.4	0.3

A control efficiency of 50% was used for daily watering of roads.

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The following emission factors shall be used for compliance calculations on the Son Haul Screen and engine:

Processing operations (pounds per ton of material handled / processed):

Pollutant	Em Factor	Emission Controls	Cont.Eff. %
Particulate Matter (PM), overall	0.1408	Enclosures / Water Sprays	80.68
PM10 (PM < 10 um), overall	0.0640	Enclosures / Water Sprays	81.25

Diesel engine (pounds per 1,000 gallons Diesel Fuel No. 2 combusted in the engine):

Pollutant	Em Factor	Emission Controls	Cont.Eff. %
Particulate Matter (PM)	15.0000		0.00
PM10 (PM < 10 um)	15.0000		0.00

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